Supplementary table 1. Statistical data for the classification of 400 hospitalisations from the Minimum Basic Data Set using ICD-9-CM codes compared with the gold standarda.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Sensitivity,**  **% (95% CI)** | **Specificity,**  **% (95% CI)** | **PPV, % (95% CI)** | **NPV,% (95% CI)** | **LR +,% (95% CI)** | **LR -,% (95% CI)** |
| **Classification of major stroke types** | |  |  |  |  |  |
| **FD** |  |  |  |  |  |  |
| **TIAb** | 68.2 (46.5-90.0) | 97.9 (96.3-99.5) | 65.2 (43.6-86.9) | 98.1 (96.7-99.6) | 32.2 (15.3-67.7) | 0.3 (0.2-0.6) |
| **Ischemicc** | 84.1 (76.7-91.5) | 92.8 (89.7-96) | 81.1 (73.3-88.8) | 94.1 (91.2-97.0) | 11.7 (7.7-17.9) | 0.2 (0.1-0.3) |
| **Haemorrhagicd** | 91.3 (77.6-100.0) | 98.1 (96.7-99.6) | 75.0 (57.2-92.9) | 99.5 (98.6-100) | 49.2 (23.4-103.6) | 0.1 (0.0-0.3) |
| **FSD** |  |  |  |  |  |  |
| **TIAb** | 50.0 (26.8-73.2) | 97.6 (96.0-99.3) | 55.0 (30.7-79.3) | 97.1 (95.3-98.9) | 21.0 (9.7-45.3) | 0.5 (0.3-0.8) |
| **Ischemicc** | 84.1 (76.7-91.5) | 84.3 (80.0-88.6) | 66.2 (57.9-74.5) | 93.6 (90.4-96.7) | 5.4 (4.1-7.1) | 0.2 (0.1-0.3) |
| **Haemorrhagic** | 91.3 (77.6-100.0) | 97.6 (96.0-99.3) | 70.0 (51.9-88.1) | 99.5 (98.6-100) | 38.3 (19.8-73.8) | 0.1 (0.0-0.3) |
|  |  |  |  |  |  |  |
| **Stroke identification** |  |  |  |  |  |  |
| **ICD-9-CM codes 430-438** | | | | |  |  |
| **FD** | 96.1 (92.6-99.5) | 87.5 (83.2-91.8) | 82.5 (76.6-88.4) | 97.3 (95.0-99.7) | 7.7 (5.5-10.7) | 0.1 (0.0-0.1) |
| **FSD** | 96.1 (92.6-99.5) | 38.3 (32.1-44.6) | 48.8 (43.0-54.7) | 94.1 (89.0-99.2) | 1.6 (1.4-1.7) | 0.1 (0.1-0.2) |
|  |  |  |  |  |  |  |
| **ICD -9-CM codes 430-435** | | | | |  |  |
| **FD** | 90.1 (85.2-95.0) | 89.1 (85.0-93.3) | 84.9 (79.2-90.5) | 93.0 (89.5-96.5) | 8.3 (5.7-11.9) | 0.1 (0.1-0.2) |
| **FSD** | 88.8 (83.5-94.2) | 79.4 (74.2-84.7) | 72.6 (65.9-79.3) | 92.1 (88.2-95.9) | 4.3 (3.4-5.6) | 0.1 (0.1-0.2) |
|  |  |  |  |  |  |  |
| **ICD -9-CM codes 430-434** | | | | |  |  |
| **FD** | 86.2 (79.8-92.5) | 90.0 (86.2-93.8) | 80.6 (73.6-87.5) | 93.1 (89.8-96.4) | 8.6 (6.0-12.4) | 0.2 (0.1-0.2) |
| **FSD** | 85.4 (79.0-91.9) | 79.6 (74.6-84.6) | 66.9 (59.4-74.3) | 91.9 (88.2-95.6) | 4.2 (3.3-5.4) | 0.2 (0.1-0.3) |
|  |  |  |  |  |  |  |
| **ICD -9-CM codes 430, 431, 434 and 436** | | | | |  |  |
| **FD** | 73.7 (66.3-81.0) | 97.6 (95.5-99.7) | 94.9 (90.5-99.3) | 85.8 (81.6-90.1) | 13.3 (7.9-22.3) | 0.3 (0.2-0.4) |
| **FSD** | 75.0 (67.8-82.2) | 94.3 (91.3-97.4) | 89.1 (83.3-94.9) | 86.0 (81.7-90.3) | 30.5 (13.7-67.5) | 0.3 (0.2-0.4) |

aFD: first diagnosis; FSD: first and secondary diagnoses; PPV: positive predictive value; NPV: negative predictive value; LR+: positive likelihood ratio; LR-: negative likelihood ratio.

**b**Events coded with ICD-9-CM codes 430-432.

**c**Events coded with ICD-9-CM codes 433 and 434.

**d**Events coded with ICD-9-CM code 435.